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EXAMINER
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PORTER, RACHEL L

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3626

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/689,374  
Filing Date: October 12, 2000  
Appellant(s): BRINSFIELD ET AL.

**MAILED**

APR 10 2007

**GROUP 3600**

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For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 12/18/2006 appealing from the Office action mailed 6/1/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The amendment after final rejection filed on July 31, 2006 has not been entered.

The after final amendment altered the scope of the pending claims because by rolling a dependent feature up into an independent claim, the Applicant alters the scope of the intervening dependent claims. The proposed amendment would have introduced limitations, which were not previously included in the intervening dependent claims. Therefore, the after-final amendment was denied entry.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

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(A) Claims 1-7,9,12-14, and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke et al (USPN 6,221,012) in view of Jacobsen et al (USPN 6,160,478).

(B) Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke and Jacobsen, as applied to claim 1, and in further view of Fuchs et al (USPN 5,788,646)

(C) Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke and Jacobsen, as applied to claim 1, in further view of and Ballantyne (USPN 5,867,821), and in further view of Gallant et al (USPN 6,705,990—to substantiate Examiner's use of Official Notice).

(D) Claim 11 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke and Jacobsen, as applied to claim 1 and 18, and in further view of Gombrich (USPN 4,857,716).

(E) Claims 15-17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke and Jacobsen, as applied to claims 1 and 18, in view of Ballantyne (USPN 5,867,821),

(F) Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke, and Jacobsen, as applied to claim 18, and in further view Ballantyne, Gallant et al (USPN 6,705,990—to substantiate Examiner's use of Official Notice), and Fuchs.

(G) Claim 26, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke and Jacobsen, and in further view of Fuchs et al (USPN 5,788,646)

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(H) Claim 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke, Jacobsen, and Fuchs, as applied to claim 26, and in further view of Gombrich.

(I) Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke, Jacobsen, Fuchs, as applied to claim 26, and in further view of Ballantyne.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,221,012 B1	MASCHKE ET AL.	04-2001
4,857,716	GOMBRICH ET AL.	08-1989
5,788,646	FUCHS ET AL.	08-1998
5,867,821 A	BALLANTYNE ET AL.	02-1999
6,160,478 A	JACOBSEN ET AL.	12-2000
6,705,990	GALLANT ET AL.	03-2004

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

(A) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(B) Claims 1-7,9,12-14, and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke et al (USPN 6,221,012) in view of Jacobsen et al (USPN 6,160,478).

[claim 1] Maschke teaches a wireless bi-directional portable patient monitor comprising:

- a communication interface having a local area network input to receive patient data from a wireless communications network within a medical care facility and an output transmit care parameters as needed to the wireless communications network (col. 3, lines 21-44; col. 5, lines 10-29))
- a processor connected to the communication interface to process the patient data and the care parameters; (col. 3, line 21-44)
- a display connected to the processor to display the processed patient data in human discernable form; and (Figure 1A (display 120-124; col. 4, lines 4-22));
- an input device connected to the processor to allow a change in the care parameters by a health care provider. (col. 6, lines 34-41; col. 8, lines 20-43—parameters may be entered/altered by healthcare workers; col. 11, lines 45-62; col. 15, lines 36-43)

Maschke discloses a patient monitor capable of wireless transmission as explained, but does not expressly disclose that the data is transmitted to/from a wireless LAN. Jacobsen discloses a system including a patient monitor linked to a WLAN for the

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transmission of patient data. (col. 3, lines 48-56; col. 4, lines 56-61; col. 10, lines 3-6; col. 11, lines 36-42) At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system/method of Maschke with the teaching of Jacobsen to include WLAN's among the type of communication networks and wireless networks used to transmit patient data. As suggested by Jacobsen, one would have been motivated to include this feature to reduce healthcare costs and to facilitate the interconnectivity of a plurality of monitored individuals by using pre-existing communication systems (col. 2, lines 21-27)

[claim 2 ] Maschke teaches a portable patient monitor wherein the processor decodes the patient data to process and display the patient data and encodes the care parameters to transmit the care parameters to a wireless communication system. (col. 3, lines 21-44; col. 5, lines 10-28; col. 6, lines 34-45; col. 8, lines 20-43) Maschke does not expressly disclose that the wireless communication system is a WLAN. Jacobsen discloses a system including a patient monitor linked to a WLAN for the transmission of patient data. (col. 3, lines 48-56; col. 4, lines 56-61; col. 10, lines 3-6; col. 11, lines 36-42) At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system/method of Maschke with the teaching of Jacobsen to include WLAN's among the type of communication networks and wireless networks used to transmit patient data. As suggested by Jacobsen, one would have been motivated to include this feature to reduce healthcare costs and to facilitate the interconnectivity of a plurality of

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monitored individuals by using pre-existing communication systems (col. 2, lines 21-27)

[claims 3-4] Maschke teaches a portable patient monitor wherein the portable patient monitor is a primary monitoring device and wherein the processor processes the patient data to display ECG and vital sign data for a selected patient. (col. 6, lines 21-38; 34-49)

[claims 5 and 12] Maschke teaches a portable patient monitor wherein the communication interface is compatible with an existing wireless communication system. (col. 3, lines 21-44; col. 5, lines 10-28) Maschke does not expressly disclose that the wireless communication system is a WLAN. Jacobsen discloses a system including a patient monitor linked to a WLAN for the transmission of patient data. (col. 3, lines 48-56; col. 4, lines 56-61; col. 10, lines 3-6; col. 11, lines 36-42) At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system/method of Maschke with the teaching of Jacobsen to include WLAN's among the type of communication networks and wireless networks used to transmit patient data. As suggested by Jacobsen, one would have been motivated to include this feature to reduce healthcare costs and to facilitate the interconnectivity of a plurality of monitored individuals by using pre-existing communication systems (col. 2, lines 21-27)



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[claims 6-7] Maschke teaches a portable patient monitor (i.e. transportable housing) by healthcare providers (col. 5, lines 30-40), but does not expressly disclose the dimensions of the device. However, at the time of the Applicant's inventions, it would have been obvious to one of ordinary skill in the art to build relatively small device (approximately the claimed dimensions), so that users may easily transport the device.

[claim 9] Maschke teaches a portable patient monitor wherein the processor is programmed to allow adjustment of alarm parameter violation limits. (col. 12, lines 34-38)

[claim 13] Maschke teaches a portable patient monitor of claim 12 wherein the processor is programmed to interface with a plurality of devices, including ventilators. (col. 16, lines 52-55) Maschke does not expressly disclose that processor interfaces with infusion pumps. However, at the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the method of Maschke to program the processor to interface with infusion pumps as well. One would have been motivated to include this feature to provide continuity of data collection for a plurality of parameters, which affect the patient's health under various conditions. (See Maschke: col. 1, lines 39-48)

[claim 14] Maschke teaches a portable patient monitor wherein the processor is programmed to receive patient reports and diagnostic analyses prepared at other

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locations in the medical care facility to provide the health care provider with the patient reports and diagnostic analyses in real time. (col. 12, lines 45-col. 13, line 43— processor receives sensor data; See also col. 10, lines 13-41; col. 11, lines 45-col. 12, line 29)

[claim 18] Maschke teaches a mobile clinical information management system to decentralize patient monitoring comprising:

- a portable patient monitor having a processor connected to a communication interface to receive and process patient data and to process and transmit care parameters (col. 3, lines 21-44; col. 5, lines 10-28; col. 6, lines 34-45), a display to display the patient data (Figure 1A (display 120-124; col. 4, lines 4-22)); and an input device to change the patient care parameters (col. 6, lines 34-41; col. 11, lines 45-62; col. 15, lines 36-43) the portable patient monitor having a configuration to allow wireless transport on a health care provider for extended periods; (col. 3, lines 21-44 col. 5, lines 10-28; col. 6, lines 34-45)
- a plurality of bedside patient monitors to connect to a plurality of patients and transmit patient data; (col. 11, lines 33-col. 14 lines, lines 34)
- a wireless communication system coupled to the plurality of bedside patient monitors and the portable patient monitor. (col. 3, lines 21-44; col. 11, lines 33-col. 14 lines, lines 34)

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Maschke teaches a mobile clinical management information system substantially as claimed, but does not expressly disclose that the wireless communication system is a WLAN. Jacobsen discloses a system including a patient monitor linked to a WLAN for the transmission of patient data. (col. 3, lines 48-56; col. 4, lines 56-61; col. 10, lines 3-6; col. 11, lines 36-42) At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system/method of Maschke with the teaching of Jacobsen to include WLAN's among the type of communication networks and wireless networks used to transmit patient data. As suggested by Jacobsen, one would have been motivated to include this feature to reduce healthcare costs and to facilitate the interconnectivity of a plurality of monitored individuals by using pre-existing communication systems (col. 2, lines 21-27)

[claim 19] Maschke teaches a system further comprising a plurality of portable patient monitors, each portable patient monitor assigned to a given number of patients. (col. 8, lines 27-40; col. 15, lines 20-52: multiple patients/multiple monitors)

[claim 20] Maschke teaches a system wherein the processor:

- decodes the patient data to process and display the patient data and encodes the care parameters to transmit the care parameters to the wireless communication system ; and (col. 3, lines 21-44; col. 5, lines 10-28; col. 6, lines 34-45)

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- processes the patient data to display ECG and vital sign data for a selected patient on the portable patient monitor. (col. 6, lines 21-38; 34-49)

Maschke does not expressly disclose that the wireless communication system is a WLAN. Jacobsen discloses a system including a patient monitor linked to a WLAN for the transmission of patient data. (col. 3, lines 48-56; col. 4, lines 56-61; col. 10, lines 3-6; col. 11, lines 36-42) At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system/method of Maschke with the teaching of Jacobsen to include WLAN's among the type of communication networks and wireless networks used to transmit patient data. As suggested by Jacobsen, one would have been motivated to include this feature to reduce healthcare costs and to facilitate the interconnectivity of a plurality of monitored individuals by using pre-existing communication systems (col. 2, lines 21-27)

[claim 21] Maschke teaches system wherein the portable patient monitor is a primary monitoring device (col. 6, lines 21-38; 34-49) and wherein a communication interface of the portable patient monitor is compatible with an existing wireless communication system. (col. 3, lines 21-44; col. 5, lines 10-28) Maschke does not expressly disclose that the wireless communication system is a WLAN. Jacobsen discloses a system including a patient monitor linked to a WLAN for the transmission of patient data. (col. 3, lines 48-56; col. 4, lines 56-61; col. 10, lines 3-6; col. 11, lines 36-42) At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system/method of Maschke with the teaching of

Jacobsen to include WLAN's among the type of communication networks and wireless networks used to transmit patient data. As suggested by Jacobsen, one would have been motivated to include this feature to reduce healthcare costs and to facilitate the interconnectivity of a plurality of monitored individuals by using pre-existing communication systems (col. 2, lines 21-27)

[claim 22] Maschke teaches a portable patient monitor (i.e. transportable housing) by healthcare providers. (col. 5, lines 30-40) but does not expressly disclose the dimensions of the device. However, at the time of the Applicant's inventions, it would have been obvious to one of ordinary skill in the art to build relatively small device (approximately the claimed dimensions), so that users may easily transport the device.

(C) Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke and Jacobsen, as applied to claim 1, and in further view of Fuchs et al (USPN 5,788,646)

[claim 8] Maschke discloses a patient monitor system that tracks information regarding patient admission and discharge (col. 8, lines 38-47). Maschke also discloses that the system includes patient alarms (col. 12, lines 34-38), but does not expressly disclose that the patient monitoring system includes a processor to silence a patient's bedside alarm. Fuchs discloses that patient monitoring systems often enable remote silencing of bedside patient alarms. (col. 1, lines 19-34) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the

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method/system of Maschke with the teaching of Fuchs to allow the processor to remotely silence patient bedside alarms. One would have been motivated to include this feature to minimize noise disruption for the patient.

(D) Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke and Jacobsen, as applied to claim 1, in further view of and Ballantyne (USPN 5,867,821), and in further view of Gallant et al (USPN 6,705,990—to substantiate Examiner's use of Official Notice).

[claim 10] Maschke and Jacobsen teach a patient monitoring system as previously explained but does not expressly disclose that the monitor further comprises a microphone and audio recorder for capturing patient events. Ballantyne teaches a patient monitoring system that includes a PDA for health care providers which allows audio annotation to a patient record(s). (col. 13, lines 42-col. 14, lines 44) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system of Maschke and Jacobsen with the teaching of Ballantyne to include a PDA and audio recording/microphone to capture patient data. As suggested by Ballantyne, one would have been motivated to include these features to facilitate the collection and distribution of patient information and enhance the quality of healthcare provided to the patient. (col. 2, lines 55-62)

Maschke, Jacobsen and Ballantyne do not expressly disclose the use of voice-over-internet protocol. However, it is respectfully submitted that the use of VOIP is well known in the art. For example, Gallant et al discloses a patient monitoring system,

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which transmits data via using a plurality of networks (e.g. LAN's, WAN's). The Gallant reference further discloses that at the time of the disclosed invention, voice-over Internet protocol (VoIP) was a well-known method used to transmit (voice) data (col. 21, lines 24-29). At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to further modify the patient monitor of Maschke and Ballantyne in combination to permit VOIP transfer. One would have been motivated include this feature to further facilitate the collection of patient information and enhance the quality of patient healthcare services. One would have been motivated include this feature to further facilitate the collection of patient information and enhance the quality of patient healthcare services. (Ballantyne: col. 2, lines 55-62)

(E) Claim 11 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke and Jacobsen, as applied to claim 1 and 18, and in further view of Gombrich (USPN 4,857,716).

[claim 11] Maschke teaches a portable patient monitor, which allows the user to check/verify that information from the monitor corresponds with the correct patient (col. 15, lines 20-35), but does not expressly disclose that the monitor further comprises a barcode scanner or that the system processor compares the barcode scanner information against a central computer to ensure that the accuracy of pharmaceutical information and doctors orders for the patient. Gombrich teaches a system including a portable monitor, including a barcode scanner. Gombrich further discloses the use of the barcode scanner to verify that the appropriate medication/doctors orders (e.g.

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dosage accuracy) are provided to the correct patient. (Figure 21; col. 15, lines 49-65; col. 16, lines 28-50) At the time of the Applicant's invention, it would have been obvious to one ordinary skill in the art to modify the method of Maschke and Jacobsen in combination with the teaching Gombrich to include the use of barcodes and barcode scanners to ensure that the proper drug dosages and doctors orders are provided to the appropriate patient. One would have been motivated include these features to improve the quality of medical treatment provided to the patient, by minimizing the possible human error and increasing the effectiveness of drug administration. (Gombrich: col. 1, lines 45-62)

[claim 24] Maschke teaches a portable patient monitor, which allows the user to check/verify that information from the monitor corresponds with the correct patient (col. 15, lines 20-35), but does not expressly disclose that the monitor further comprises a barcode scanner or that the system processor compares the barcode scanner information against a central computer to ensure that the accuracy of pharmaceutical information and doctors orders for the patient. Gombrich teaches a system including a portable monitor, including a barcode scanner and also discloses the use of patient wristbands with barcodes. Gombrich further discloses the use of the barcode scanner to verify that the appropriate medication/doctors orders (e.g. dosage accuracy) are provided to the correct patient. (Figure 21; col. 15, lines 49-65; col. 16, lines 28-50) At the time of the Applicant's invention, it would have been obvious to one ordinary skill in the art to modify the method of Maschke and Jacobsen in combination with the teaching



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Gombrich to include the use of patient barcodes and barcode scanners to ensure that the proper drug dosages and doctors orders are provided to the appropriate patient.

One would have been motivated include these features to improve the quality of medical treatment provided to the patient by minimizing the possible human error and increasing the effectiveness of drug administration. (Gombrich: col. 1, lines 45-62)

Maschke also teaches a portable patient monitor wherein the processor is programmed to interface with a plurality of devices, including ventilators, (col. 16, lines 52-55) and to provide patient reports and diagnostic analyses to the health care provider(s) in real time. (col. 12, lines 45-col. 13, line 43—processor receives sensor data) Maschke does not expressly disclose that processor interfaces with infusion pumps. However, at the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the method of Maschke and Jacobsen in combination to program the processor to also interface with infusion pumps. One would have been motivated to include this feature to provide continuity of data collection for a plurality of parameters, which affect the patient's health under various conditions. (See Maschke: col. 1, lines 39-48)

(F) Claims 15-17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke and Jacobsen, as applied to claims 1 and 18, in view of Ballantyne (USPN 5,867,821),

[claims 15 and 17] Maschke teaches a patient monitoring system as previously explained but does not expressly disclose that the patient monitor further comprises a

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PDA or that the monitor further comprises a microphone and audio recorder for capturing patient events. Ballantyne teaches a patient monitoring system that includes a PDA for health care providers which allows audio annotation to a patient record(s). (col. 13, lines 42-col. 14, lines 44) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system of Maschke and Jacobsen with the teaching of Ballantyne to include a PDA and audio recording/microphone to capture patient data. As suggested by Ballantyne, one would have been motivated to include these features to facilitate the collection and distribution of patient information and enhance the quality of healthcare provided to the patient. (col. 2, lines 55-62)

[claim 16] Maschke teaches a patient monitoring system as previously explained in the rejection of claim 15, but does not expressly disclose that the patient monitor further comprises a PDA. Ballantyne teaches a patient monitoring system that includes a PDA for health care providers, which provides reminders and scheduling information. (col. 13, lines 42-col. 14, lines 44—e.g. messaging and paging features, things to do) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system of Maschke and Jacobsen with the teaching of Ballantyne to include a PDA, with scheduling and reminder features. As suggested by Ballantyne, one would have been motivated to include these features to facilitate the distribution of patient information, to enhance the quality of healthcare provided to the patient (col. 2,

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lines 55-62), and to ensure that patients receive appropriate medical services in a timely manner.

[claim 25] Maschke teaches a patient monitoring system as previously explained but does not expressly disclose that the patient monitor further comprises a PDA with scheduling or reminder functions or that the monitor further comprises a microphone and audio recorder for capturing patient events. Ballantyne teaches a patient monitoring system that includes a PDA for health care providers, which provides reminders and scheduling information, (col. 13, lines 42-col. 14, lines 44—e.g. messaging and paging features) and which allows audio annotation to a patient record(s). (col. 13, lines 42-col. 14, lines 44) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system of Maschke and Jacobsen in combination with the teaching of Ballantyne to include a PDA with scheduling and reminder features and which includes audio recording/microphone to capture patient data. As suggested by Ballantyne, one would have been motivated to include these features to facilitate the collection and distribution of patient information, to enhance the quality of healthcare provided to the patient (col. 2, lines 55-62), and to ensure that patients receive appropriate medical services in a timely manner.

(G) Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke, and Jacobsen, as applied to claim 18, and in further view Ballantyne, Gallant et al (USPN 6,705,990—to substantiate Examiner's use of Official Notice), and Fuchs.

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[claim 23] Maschke teaches a patient monitoring system which tracks the admission and discharge of a patient (col. 8, lines 38-47) and which adjusts alarm parameter violation limits (col. 8, lines 20-43; col. 12, lines 34-38). Maschke and Jacobsen do not expressly disclose that the system includes a speaker and microphone or that the system processes data to permit voice-over-internet protocol transfer. Ballantyne teaches a patient monitoring system that includes a PDA for health care providers which allows audio annotation to a patient record(s). (col. 13, lines 42-col. 14, lines 44) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system of Maschke and Jacobsen with the teaching of Ballantyne to include audio recording/microphone to capture patient data. As suggested by Ballantyne, one would have been motivated to include these features to facilitate the collection and distribution of patient information and to enhance the quality of healthcare provided to the patient. (col. 2, lines 55-62)

Maschke, Jacobsen and Ballantyne in combination do not expressly disclose the use of voice-over-internet protocol. However, it is respectfully submitted that the use of VOIP was well known in the art at the time of the Applicant's invention. For example, Gallant et al discloses a patient monitoring system, which transmits data via using a plurality of networks (e.g. LAN's, WAN's). The Gallant reference further discloses that at the time of the disclosed invention, voice-over Internet protocol (VoIP) was a well-known method used to transmit (voice) data (col. 21, lines 24-29). At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to further modify the patient monitor system of Maschke, Jacobsen and Ballantyne in

combination to permit VOIP transfer. One would have been motivated include this feature to further facilitate the collection of patient information and enhance the quality of patient healthcare services. (Ballantyne: col. 2, lines 55-62)

Maschke, Jacobsen, Gallant and Ballantyne in combination also fail to disclose that the system allows the alarm of a bedside patient monitor to be silenced remotely, although Maschke does disclose that the system includes patient alarms (col. 12, lines 34-38). Fuchs discloses that patient monitoring systems often enable remote silencing of bedside patient alarms. (col. 1, lines 19-34) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the method/system of Maschke and Ballantyne in combination with the teaching of Fuchs to allow the processor to remotely silence patient bedside alarms. As suggested by Fuchs, one would have been motivated to include these features to reliably inform the staff of medical emergencies associated with the patients (col. 1, lines 59-63), while minimizing noise disruption for the patient.

(H) Claim 26, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke and Jacobsen, and in further view of Fuchs et al (USPN 5,788,646)

[claim 26] Maschke discloses a computer program residing in memory of a portable patient monitor to cause a processor to:

- remotely interface to a wireless communication system to acquire any patient alarms; (col. 3, lines 21-48; col. 6, lines 59-64; col. 12, lines 30-38)

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- use alarms associated with patient monitor; (col. 6, lines 59-64; col. 12, lines 30-38)
- display patient data (col. 4, lines 4-22)

Maschke does not expressly disclose that the wireless communication system is a WLAN. Jacobsen discloses a system including a patient monitor linked to a WLAN for the transmission of patient data, including patient alarms (Abstract; col. 3, lines 48-56; col. 4, lines 56-61; col. 10, lines 3-6, lines 43-60; col. 11, lines 36-42) At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system/method of Maschke with the teaching of Jacobsen to include WLAN's among the type of communication networks and wireless networks used to transmit patient data. As suggested by Jacobsen, one would have been motivated to include this feature to reduce healthcare costs and to facilitate the interconnectivity of a plurality of monitored individuals by using pre-existing communication systems (col. 2, lines 21-27)

Maschke teaches a patient monitoring system (and computer program for operating the system) but does not expressly disclose that the patient monitoring system sounds an alarm if a patient alarm occurs or that system allows the user to silence a patient's bedside alarm. Fuchs discloses patient monitoring systems that sound alarms when a patient alarm (e.g. emergency) occurs and further discloses that patient monitoring systems often enable remote silencing of bedside patient alarms. (col. 1, lines 19-34) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the method/system of Maschke and Jacobsen

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in combination with the teaching of Fuchs to provide alarms when patients experience emergencies and to allow the user to remotely silence patient bedside alarms. As suggested by Fuchs, one would have been motivated to include these features to reliably inform the staff of medical emergencies associated with the patients (col. 1, lines 59-63), while minimizing noise disruption for the patient.

[claim 28] Maschke teaches a computer program wherein the computer program further causes the processor to allow user adjustment of alarm parameter violation limits. (col. 12, lines 34-38)

[claim 29] Maschke teaches a computer program wherein the computer program further causes the processor to relay patient admission and discharge information to the communications network. (col. 3, lines 21-44; col. 8, lines 27-47: patient data accessible after admission and before discharge) Maschke does not expressly disclose that the communication system is a WLAN. Jacobsen discloses a system including a patient data management system linked to a WLAN for the transmission of patient data. (col. 3, lines 48-56; col. 4, lines 56-61; col. 10, lines 3-6; col. 11, lines 36-42) At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system/method of Maschke with the teaching of Jacobsen to include WLAN's among the type of communication networks and wireless networks used to transmit patient data. As suggested by Jacobsen, one would have been motivated to include this feature to reduce healthcare costs and to facilitate the interconnectivity of a plurality of monitored individuals by using pre-existing communication systems (col. 2, lines 21-27)

(I) Claim 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke, Jacobsen, and Fuchs, as applied to claim 26, and in further view of Gombrich.

[claim 27] Maschke and Fuchs teach a computer program for a patient monitoring system/program as explained in the rejection of claim 26. Maschke and Fuchs do not expressly disclose that the processor is programmed to check the battery and to indicate whether the rechargeable battery of the monitor is low, although Maschke does disclose the use of a rechargeable battery pack used to power the patient monitoring system (col. 4, lines 4-10; col. 5, lines 4-9). Gombrich teaches a system wherein a patient monitor checks the recharged battery level and displays a warning if the charge is low (Figures 33-35; col. 24, lines 39-68). At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system/computer of Maschke, Jacobsen, and Fuchs to check the charge of the battery and to indicate if the charge is low. One would have been motivated to include this feature to minimize the possibility of inaccurate readings from the monitoring device (i.e. from lack of power)

[claim 31] Maschke and Fuchs teach the system/computer program of claim 26 as explained in the rejection of claim 26. Maschke teaches a portable patient monitor, which allows the user to check/verify that information from the monitor corresponds with



the correct patient (col. 15, lines 20-35), but does not expressly disclose that the monitor further comprises a barcode scanner or that the system processor compares the barcode scanner information against a central computer to ensure that the accuracy of pharmaceutical information and doctors orders for the patient. Gombrich teaches a system including a portable monitor, including a barcode scanner and also discloses the use of patient wristbands with barcodes. Gombrich further discloses the use of the barcode scanner to verify that the appropriate medication/doctors orders (e.g. dosage accuracy) are provided to the correct patient. (Figure 21; col. 15, lines 49-65; col. 16, lines 28-50) At the time of the Applicant's invention, it would have been obvious to one ordinary skill in the art to further modify the system of Maschke, Jacobsen, and Fuchs in combination with the teaching Gombrich to include the use of patient barcodes and barcode scanners to ensure that the proper drug dosages and doctors orders are provided to the appropriate patient. One would have been motivated include these features to improve the quality of medical treatment provided to the patient by minimizing the possible human error and increasing the effectiveness of drug administration. (Gombrich: col. 1, lines 45-62)

(J) Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maschke, Jacobsen, Fuchs, as applied to claim 26, and in further view of Ballantyne.

[claim 30] Maschke and Fuchs teach the computer program of claim 26, as explained in the rejection of claim 26. Maschke teaches a patient monitoring system as previously explained but does not expressly disclose that the patient monitor

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system/program causes the processor to process audio recordings for capturing patient events. Ballantyne teaches a patient monitoring system that includes a processor for health care providers which allows audio annotation to a patient record(s). (col. 13, lines 42-col. 14, lines 44) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to further modify the system of Maschke and Fuchs in combination with the teaching of Ballantyne to include a processor to process audio recordings to capture patient data. As suggested by Ballantyne, one would have been motivated to include this feature to facilitate the collection and distribution of patient information and enhance the quality of healthcare provided to the patient. (col. 2, lines 55-62)

#### **(10) Response to Argument**

(A) Appellant argues that Jacobsen fails to disclose "a bidirectional monitor having a WLAN output of a communication interface to transmit care parameters as needed to the WLAN," as required by claim 1.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

It should be noted that the Maschke reference has been relied upon to disclose a portable monitor that includes a communication interface input/output to receive and

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transmit information in a health care facility as explained in the rejection of claim 1.

Moreover, the Maschke reference discloses that the communication within the system occurs over a plurality of network types, include WAN's and LAN's and that the system supports wireless communication as explained in the rejection of claim 1. Maschke does not expressly disclose that the data is transmitted to/from a wireless LAN.

Jacobsen discloses a system including a patient monitor linked to a WLAN for the transmission of patient data. (col. 3, lines 48-56; col. 4, lines 56-61; col. 10, lines 3-6; col. 11, lines 36-42) It is the combination of references, which has been relied upon to address the limitations of claim 1.

Moreover, it should be noted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Appellant further argues that Maschke does not disclose "an input device connected to the processor to allow a change in parameters by a health care parameters." Examiner respectfully disagrees. Maschke discloses an input device connected to the processor to allow a change in the care parameters by a health care provider. (col. 6, lines 34-41; col. 8, lines 20-43 memory cards are used to allow parameters entered/altered by healthcare provider, col. 11, lines 45-62) For example,

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Maschke explains that the memory cards can be used to input set up data (alarm limits).

(See also col. 12, lines 34-39 for care parameter transmitted adjustments)

Again, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The Jacobsen reference was relied upon to disclose a system including a patient monitor linked to a WLAN for the transmission of patient data. (col. 3, lines 48-56; col. 4, lines 56-61; col. 10, lines 3-6; col. 11, lines 36-42) It is the combination of references, which has been relied upon to address the limitations of claim 1.

(B) Appellant argues that Maschke does not address the limitations of claim 14. In particular, the Appellant argues that the Maschke does not disclose “a processor programmed to receive patient reports and diagnostic analysis prepared at other locations in the medical care facility to provide the health care provider....”

Maschke teaches a portable patient monitor wherein the processor is programmed to receive patient reports and diagnostic analyses prepared at other locations in the medical care facility to provide the health care provider with the patient reports and diagnostic analyses in real time. (col. 12, lines 45-col. 13, line 43—processor receives sensor data; See also col. 10, lines 13-41; col. 11, lines 45-col. 12, line 29)

The processor in the Maschke reference receives patient data, diagnostic reports/analyses from a plurality of sources and sensors. This information is provided to healthcare providers during procedures with the patient and while the patient is away from a healthcare provider. In response to applicant's argument that claim 14 requires much more than the receipt of patient data and patient reports, a recitation of the intended use of the claimed invention must result in a *structural* difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

(C) As per claim 18, the appellant argues that the prior art does not disclose "an input device to change the patient care parameters."

In response, Appellant further argues that Maschke does not disclose "an input device connected to the processor to allow a change in parameters by a health care parameters." Examiner respectfully disagrees. Maschke discloses an input device connected to the processor to allow a change in the care parameters by a health care provider. (col. 6, lines 34-41; col. 8, lines 20-43 memory cards are used to allow parameters entered/altered by healthcare provider; col. 11, lines 45-62) For example, Maschke explains that the memory cards can be used to input set up data (alarm limits). (See also col. 12, lines 34-39 for care parameter transmitted adjustments)

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(D) As per claim 8, Appellant argues that the prior art fails to disclose that the portable patient monitor processor is programmed to allow silencing of a bedside monitor, and admit and discharge patients.

In response, Maschke discloses that the processor is programmed to *allow* (i.e. facilitate) admit and discharge. (col. 8, lines 38-47) A card is associated with the patient at admission and is provides the monitor rapid access to patient history upon admission. Maschke discloses that the patient monitor system that tracks information regarding patient admission and discharge (col. 8, lines 38-47).

Maschke also discloses that the system includes patient alarms (col. 12, lines 34-38), but does not expressly disclose that the patient monitoring system includes a processor to silence a patient's bedside alarm. Fuchs discloses that patient monitoring systems often enable remote silencing of bedside patient alarms. (col. 1, lines 19-34) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the method/system of Maschke with the teaching of Fuchs to allow the processor to remotely silence patient bedside alarms.

(E) Appellant argues there is no motivation to combine Gallant with the Maschke and Jacobsen, and Ballantyne, as applied in the rejection of claim 10.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

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references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Maschke, Jacobsen, and Ballantyne were combined to address the limitations of claim 10, and the Examiner supported the combination by providing motivation from the Ballantyne reference. Moreover, all the references relate to patient monitoring devices and address problems encountered in the field of acquiring patient data.

The Gallant reference was introduced only to substantiate the use of Official Notice as a result of the Appellant's challenge. However, the Gallant reference, which is also a health monitoring system, establishes that VoIP was well known at the time of the appellant's invention. Again, the Examiner supported the combination by providing motivation from the Ballantyne reference.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

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(F) Appellant argues that the prior art does not disclose relaying "admission and discharge data" and does not disclose a WLAN.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Maschke discloses a computer program residing in memory of a portable patient monitor to cause a processor to remotely interface to a wireless communication system to acquire any patient alarms; (col. 3, lines 21-48; col. 6, lines 59-64; col. 12, lines 30-38)

Maschke does not expressly disclose that the wireless communication system is a WLAN. Jacobsen discloses a system including a patient monitor linked to a WLAN for the transmission of patient data, including patient alarms (Abstract; col. 3, lines 48-56; col. 4, lines 56-61; col. 10, lines 3-6, lines 43-60; col. 11, lines 36-42) At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system/method of Maschke with the teaching of Jacobsen to include WLAN's among the type of communication networks and wireless networks used to transmit patient data. As suggested by Jacobsen, one would have been motivated to include this feature to reduce healthcare costs and to facilitate the interconnectivity of a plurality of monitored individuals by using pre-existing communication systems (col. 2, lines 21-27)



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Furthermore, Maschke discloses a communications system to acquire patient data, including patient ID/name data (e.g. admission/discharge data)(col. 5, lines 10-29; col. 8, lines 38-47; col. 15, lines 15-35—during updating process;).

Also, it should be noted that the type of data transferred in system or method claim must affect the structure of a system component or must alter the manner and result of the given method. In the case of claim 29, the transfer of patient data across the communication system occurs, and the type of patient data does not impact how the method is performed. Therefore, these differences are found to be nonfunctional description material and are not functionally involved in the steps recited. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability. See *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

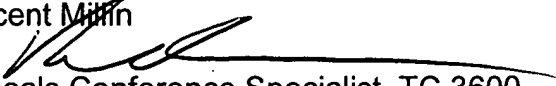
Respectfully submitted,


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